

(12) UK Patent Application (19) GB (11) 2 115 477 A

- (21) Application No 8204444
 (22) Date of filing 16 Feb 1982
 (43) Application published 7 Sep 1983
 (51) INT CL³
 E05D 3/02 7/10 11/06
 (52) Domestic classification
 E2F 605 650 AG CQ
 U1S 1714 1715 E2F
 (56) Documents cited
 GB 1451739
 GB 1444556
 GB 1431756
 GB 1431673
 GB 1399532
 GB 1396320
 GB 0720959
 GB 0444926
 GBA 2070680
 (58) Field of search
 E2F
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(54) Hinges

(57) A hinge consists of two main parts one to attach to a post or wall etc., to act as the fulcrum point ref: 'D' and/or 'F' and the other to fasten by bolts, pins or weld or other means to a gate or door, reference 'E' and/or 'G'.

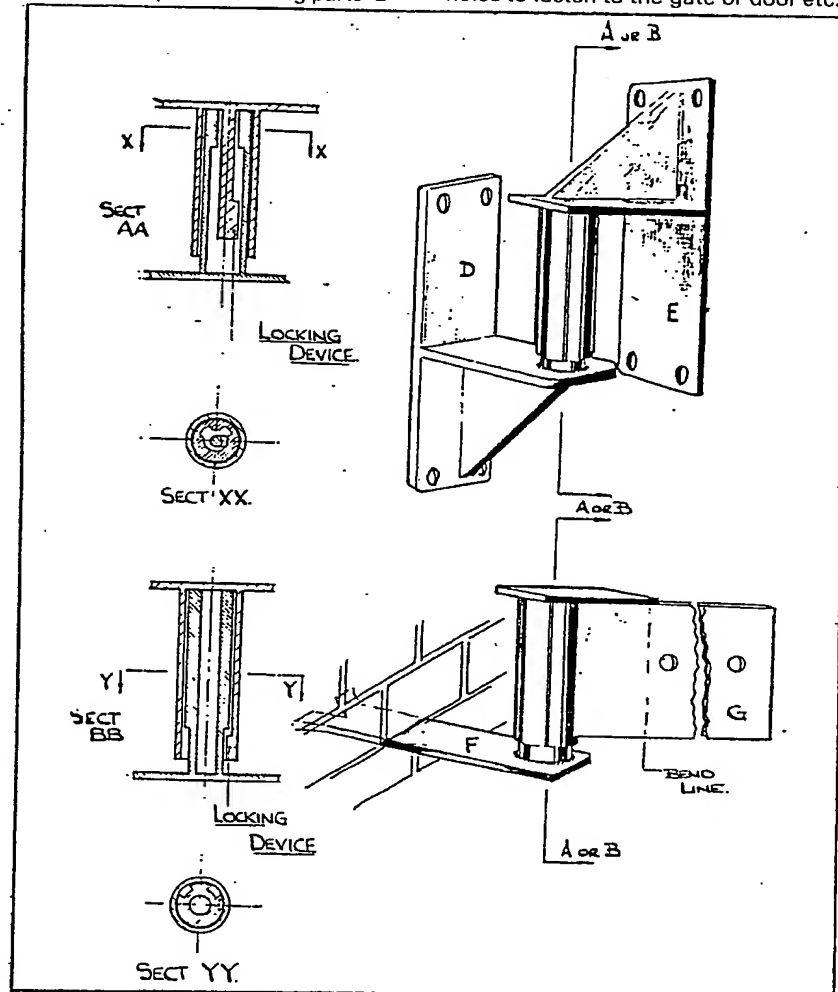
Parts 'D' and 'F' are made from suitable material of sufficient strength to accept the load imposed, the tube (view 'AA' or 'BB') shown in the vertical plain is welded or fixed to the bracketry desired 'D' or 'F' and has a key-way cut or fabricated on the inner or outer wall, thus allowing parts 'E'

and/or 'G' incorporating the locking device to pass-over. When the latter mentioned parts 'E' or 'G' is fitted to a gate or door the key-way is positioned so that this can only happen when the gate/door is half way open.

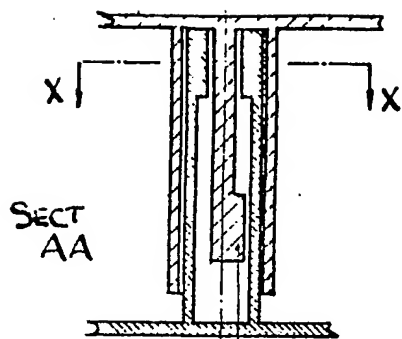
The bracketry can have several holes to secure to a post or wall etc.,

Parts 'E' and 'G' are made from suitable material of sufficient strength to carry gate or door, the tube view ('AA' or 'BB') that is shown in the vertical plain is welded or fixed in some other manner to the bracketry desired 'E' or 'G' which includes the locking device.

The bracketry can have several holes to fasten to the gate or door etc.

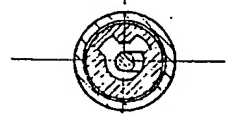


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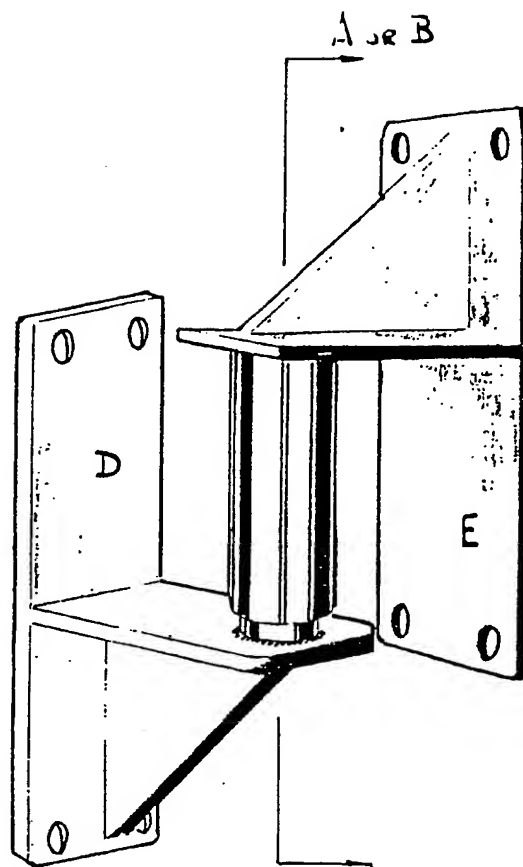


SECT AA

LOCKING
DEVICE.

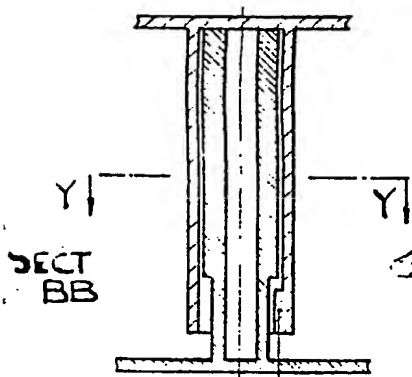


SECT XX.



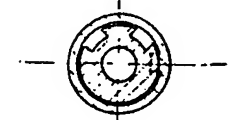
A or B

A or B

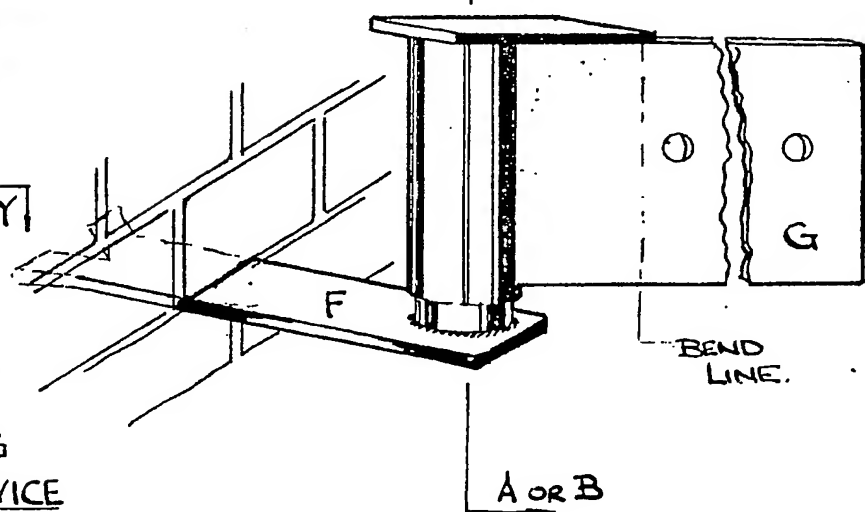


SECT BB

LOCKING
DEVICE



SECT YY.



BEND
LINE.

A or B

SPECIFICATION

Gate or door hinge lubricated by grease and incorporating an anti-lift device when locked

This invention relates to a gate or door hinge which is lubricated by grease to reduce wear and allow free movement with minimum effort, and to incorporate a device which prevents a locked gate or door being lifted off its hinges.

It has been known for some time that the hook and ride type of hinge when fitted to gates or doors, even when securely locked does not prevent an intruder from lifting the complete gate or door up and off the rides to gain entry.

The object of this invention is to provide a hinge which is lubricated by grease, thus reducing wear. To include a device which will prevent a gate or door being lifted off its rides when securely locked, and to have a facility to allow the easy removal of the gate or door for maintenance or other reasons.

According to the invention the device consists of two main parts.

One to attach to a post or wall etc., to act as the fulcrum point, which will be referred to as 'D' and/or 'F', and the other to be fastened by bolt, pins or weld, or other means to the gate or door, which will be referred to as 'E' and/or 'G'.

Part 'D' and/or 'F' are made from suitable material of sufficient strength to accept the load imposed. The tube (view 'AA' or 'BB') that is shown in the vertical plane, is welded or fixed by some other manner to the bracketry desired, 'D' or 'F' and has a key way cut or fabricated on the inner or outer wall, so that it can allow part 'E' and/or 'G' which incorporates the locking device to pass over, when the latter mentioned part 'E' or 'G' is fitted to the gate or door etc. The key way is positioned so that this can only happen when the gate/door is half way open.

The bracketry can have several holes to secure to a post or wall etc.

Parts 'E' and 'G' are made from suitable material of sufficient strength to carry gate or

door.

The tube view ('AA' or 'BB') that is shown in the vertical plane is welded or fixed in some other manner to the bracketry desired 'E' or 'G' which included the locking device. The bracketry can have several holes to fasten to the gate or door etc.

The device operates in the following way:—

Two or more parts 'D' or 'F' are positioned and secured in the required locations.

Two or more parts 'E' or 'G' are positioned and secured to a gate or door.

All tubes are then packed with grease or other desired thick lubricant.

The gate or door is then lined up so that parts 'E' or 'G' are directly in line and above parts 'D' or 'F', the gate or door is then gently lowered so that the two parts become engaged. When this has occurred, the gate or door is carefully positioned so that it is half-way open, thus allowing the locking device to pass through the key-way.

As the lubricant/grease tend to force its way between the two parts, the gate or door will settle when the pressure of the grease is reduced by the weight of the gate/door. It will then open and shut with the minimum of effort.

When the gate or door is in a closed and locked position it is impossible to lift off its rides.

To remove the gate or door for maintenance purposes etc., simply open to half-way and lift.

CLAIMS

It has been known for some time that the hook and ride type of hinge, when fitted to gates or doors, even when closed and locked does not prevent an intruder from lifting the complete gate or door up and off the rides to gain entry.

The object of this invention is to provide a hinge which is lubricated by grease, thus reducing wear, and incorporating a device to prevent same from being lifted off its rides when the gate or door is locked.